## **WEST Search History**

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DATE: Tuesday, February 21, 2006

Hide?	<u>Set</u> <u>Name</u>	Query	<u>Hit</u> <u>Count</u>
	DB=PC	GPB, USPT, EPAB, JPAB, DWPI; PLUR=YES; OP=OR	
	Ll	(Pmepa1 or pmepa-1 or mivr1 or mivr-1) same (gene or sequence or \$1dna or protein or \$5peptide)	16

END OF SEARCH HISTORY



# results of BLAST

#### BLASTN 2.2.13 [Nov-27-2005]

#### Reference:

Altschul, Stephen F., Thomas L. Madden, Alejandro A. Schäffer, Jinghui Zhang, Zheng Zhang, Webb Miller, and David J. Lipman (1997), "Gapped BLAST and PSI-BLAST: a new generation of protein database search programs", Nucleic Acids Res. 25:3389-3402.

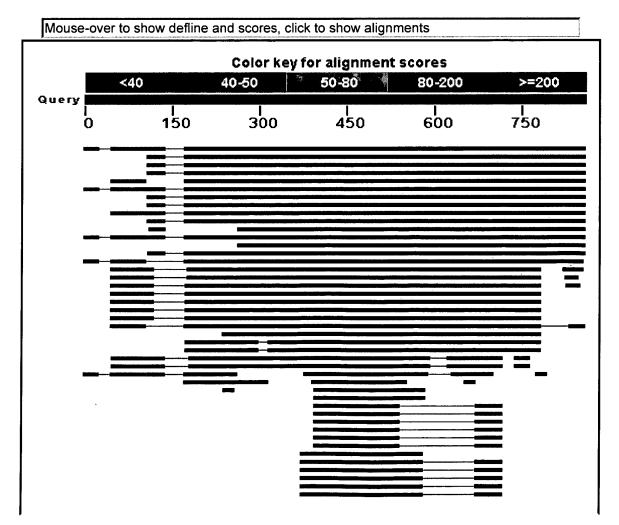
RID: 1140558082-32062-97435568291.BLASTQ4

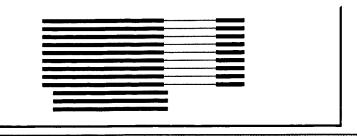
Database: All GenBank+EMBL+DDBJ+PDB sequences (but no EST, STS, GSS, environmental samples or phase 0, 1 or 2 HTGS sequences)
3,743,317 sequences; 16,630,950,921 total letters

If you have any problems or questions with the results of this search please refer to the  ${\tt BLAST\ FAQs}$  Taxonomy reports

Query= Length=861

### **Distribution of 140 Blast Hits on the Query Sequence**





Sequences producing significant alignments:	Score (Bits)	E Value
gi 40317614 ref NM 020182.3  Homo sapiens transmembrane, pros	1322	0.0
gi 40317615 ref NM 199169.1  Homo sapiens transmembrane, pros	<u>1322</u>	0.0
gi  40317619   ref   NM   199171.1   Homo sapiens transmembrane, pros	<u>1322</u>	0.0
gi   40317617   ref   NM 199170.1   Homo sapiens transmembrane, pros	1322	0.0
gi   50492890   emb   CR612083.1   full-length cDNA clone CS0DJ015YF	1322	0.0
<u>gi 16303741 gb AF305616.1 AF305616</u> Homo sapiens STAG1/PMEPA1 mRN	<u>1322</u>	0.0
gi 22121998 gb AY128643.1  Homo sapiens PMEPA1 variant A protein	<u>1322</u>	0.0
gi 9255808 gb AF224278.1 AF224278 Homo sapiens PMEPA1 protein (P	1322	0.0
gi 16198474 gb BC015918.1  Homo sapiens transmembrane, prosta	<u>1314</u>	0.0
gi 51593770 gb BC080635.1  Homo sapiens transmembrane, prosta	<u>1298</u>	0.0
gi   11546043   emb   AL035541.15   HS718J7   Human DNA sequence from c gi   15824468   gb   AF305426.1   AF305426   Homo sapiens solid tumor-a	1039 1039	0.0
gi 55652999 ref XM 514746.1  PREDICTED: Pan troglodytes LOC45836	995	0.0
gi   73992626   ref   XM 543070.2   PREDICTED: Canis familiaris simi	872	0.0
gi 82524234 emb CR956367.12 Pig DNA sequence from clone PigE	644	0.0
gi 18605637 gb BC023092.1  Mus musculus cDNA clone IMAGE:3989996	<u>531</u>	1e-147
gi 23331176 gb BC036995.1  Mus musculus transmembrane, prosta	<u>531</u>	1e-147
gi 12843488 dbj AK008976.1  Mus musculus adult male stomach c	529	5e-147
gi 62027429 gb BC092094.1  Mus musculus cDNA clone IMAGE:3153171	<u>529</u>	5e-147
gi 47124388 gb BC069890.1  Mus musculus transmembrane, prosta	529	5e-147
gi 31340603 ref NM 022995.2 Mus musculus transmembrane, pros	529	5e-147
gi 74201952 dbj AK136450.1  Mus musculus adult male colon cDN	521	1e-144
gi 62646459 ref XM_230899.3  PREDICTED: Rattus norvegicus tra	464	2e-127
gi   12004973   gb   AF220208.1   AF220208   Mus musculus Nedd4 WW doma	450	3e-123
gi   82887825   ref   XM   913670.1         PREDICTED: Mus musculus similar         gi   32398588   emb   AL837509.11         Mouse DNA sequence from clone RP	424	2e-115 1e-113
gi 53133895 emb AJ720618.1  Gallus gallus mRNA for hypothetical	303	5e-79
gi   71895608   ref   NM   001031492.1   Gallus gallus similar to Tran gi   7161781   emb   AL121913.4   HSJ1059L7   Human DNA sequence from c	303 182	5e-79 1e-42
gi   73945987   ref   XM 541100.2   PREDICTED: Canis familiaris hypo	178	2e-41
gi   76651938   ref   XM 588908.2   PREDICTED: Bos taurus hypothetical	168	2e-38
gi   76633111   ref   XM   869738.1   PREDICTED: Bos taurus similar to	163	1e-36
gi   68384134   ref   XM 679680.1   PREDICTED: Danio rerio similar t	157	7e-35
gi 31790549 emb BX005347.5 Zebrafish DNA sequence from clone	157	7e-35
gi 34556291 gb AC111069.9 Mus musculus chromosome 18, clone	<u>137</u>	7e-29 ■
gi   26342572   dbj   AK052338.1   Mus musculus 13 days embryo heart	<u>137</u>	7e-29 <b>Ľ</b>
gi 26333688 dbj AK040289.1  Mus musculus 0 day neonate thymus	137	7e-29
<u>gi 18490514 gb BC022716.1 </u> Mus musculus DNA segment, Chr 18,	_137	7e-29
<u>gi 31324574 ref NM 172631.2 </u> Mus musculus DNA segment, Chr 18	_137	7e-29
<u>gi 66272338 gb BC096371.1 </u> Mus musculus DNA segment, Chr 18,	<u>137</u>	7e-29
http://www.nchi.nlm.nih.gov/BLAST/Blast.cgi		2/21/06

RID=1140558082-32062-97435568291.BLASTQ4,					
Sbjct	687		746		
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Query Sbjct	414 807	GTACCTGCAGCACGAGATCGACCTGCCACCCATCTCGCTGTCAGACGGGGAGGAGCC	473 866		
Query Sbjct	474 867	CCCACCCTACCAGGGCCCCTGCACCCTCCAGCTTCGGGACCCCGAGCAGCAGCTGGAACT	533 926		
Query Sbjct	534 927	GAACCGGGAGTCGGTGCGCACCCCCAAACAGAACCATCTTCGACAGTGACCTGATGGA	593 986		
Query Sbjct	594 987	TAGTGCCAGGCTGGGCGCCCCTGnnnnnnnAGCAGTAACTCGGGCATCAGCGCCACGTG	653 1046		
Query Sbjct	654 1047	CTACGGCAGCGGCGCCATGGAGGGCCCCCCCCCCACCTACAGCGAGGTCATCGGCCA	713 1106		
Query Sbjct	714 1107	CTACCCGGGGTCCTCCTTCCAGCACCAGCAGAGCAGTGGGCCGCCCTCCTTGCTGGAGGG	773 1166		
Query Sbjct	774 1167	GACCCGGCTCCACCACACACACCCCCTAGAGAGCGCAGCCATCTGGAGCAAAGA	833 1226		
Query Sbjct	834 1227	GAAGGATAAACAGAAAGGACACCCTCTC 861			
Ident Stran	<pre>Score = 188 bits (95), Expect = 2e-44 Identities = 95/95 (100%), Gaps = 0/95 (0%) Strand=Plus/Plus Query 47 GGCAGCCCAATGTCTCCTGCACGTGCAACTGCAAACGCTCTTTGTTCCAGAGCATGGAGA 106</pre>				
Sbjct Query Sbjct		TCACGGAGCTGGAGTTTGTTCAGATCATCATCATC 141	499		
<pre>Score = 56.0 bits (28), Expect = 2e-04 Identities = 28/28 (100%), Gaps = 0/28 (0%) Strand=Plus/Plus Query 1 ATGCACCGCTTGATGGGGGTCAACAGCA 28</pre>					
Sbjct	394	421			
> gi 40317615 ref NM 199169.1  UG Homo sapiens transmembrane, prostate androgen f transcript variant 2, mRNA Length=4538					
Score = 1322 bits (667), Expect = 0.0 Identities = 688/688 (100%), Gaps = 0/688 (0%) Strand=Plus/Plus					
Query Sbjct		CACGTGCCTGCTGAGCCACTACAAGCTGTCTGCACGGTCCTTCATCAGCCGGCACAGCCA	233 234		
Query Sbjct		GGGGCGGAGGAGAAGATGCCCTGTCCTCAGAAGGATGCCTGTGGCCCTCGGAGAGCAC	293 294		
Query	294 7	AGTGTCAGGCAACGGAATCCCAGAGCCGCAGGTCTACGCCCCGCCTCGGCCCACCGACCG	353		
http://www.ncbi.nlm.nih.gov/BLAST/Blast.cgi 2/21/06					

. RID=1140558082-32062-97435568291.BLASTQ4,					
Sbjct	295		354		
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Sbjct	355		414		
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Sbjct	415		474		
Query	474	CCCACCCTACCAGGGCCCCTGCACCCTCCAGCTTCGGGACCCCGAGCAGCAGCTGGAACT	533		
Sbjct	475		534		
Query	534	GAACCGGGAGTCGCTGCGCGCACCCCCAAACAGAACCATCTTCGACAGTGACCTGATGGA	593		
Sbjct	535		594		
Query	594	TAGTGCCAGGCTGGGCGCCCCTGnnnnnnnAGCAGTAACTCGGGCATCAGCGCCACGTG	653		
Sbjct	595		654		
Query	654	CTACGGCAGCGGCGCGCATGGAGGGGCCGCCGCCCACCTACAGCGAGGTCATCGGCCA	713		
Sbjct	655		714		
Query	714	CTACCCGGGGTCCTCCTTCCAGCACCAGCAGAGCAGTGGGCCGCCCTCCTTGCTGGAGGG	773		
Sbjct	715		774		
Query	774	GACCCGGCTCCACCACACACACCCCCTAGAGAGCGCAGCCATCTGGAGCAAAGA	833		
Sbjct	775		834		
Query Sbjct	834 835	GAAGGATAAACAGAAAGGACACCCTCTC 861			
Score = 63.9 bits (32), Expect = 8e-07 Identities = 32/32 (100%), Gaps = 0/32 (0%) Strand=Plus/Plus					
Query Sbjct	110 111	CGGAGCTGGAGTTTGTTCAGATCATCATC 141 142			
> \[ \frac{\text{gi}   40317619   \text{ref}   \text{NM} \ 199171.1  }{\text{U E G}} \] Homo sapiens transmembrane, prostate androgen transcript variant 4, mRNA Length=4590					
Score = 1322 bits (667), Expect = 0.0 Identities = 688/688 (100%), Gaps = 0/688 (0%) Strand=Plus/Plus					
Query	174	CACGTGCCTGAGCCACTACAAGCTGTCTGCACGGTCCTTCATCAGCCGGCACAGCCA	233		
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Query	234	GGGGCGGAGGAGAAGATGCCCTGTCCTCAGAAGGATGCCTGTGGCCCTCGGAGAGCAC	293		
Sbjct	287		346		
Query	294	AGTGTCAGGCAACGGAATCCCAGAGCCGCAGGTCTACGCCCCGCCTCGGCCCACCGACCG	353		
Sbjct	347		406		
Query	354	CCTGGCCGTGCCGCCCTTCGCCCAGCGGGAGCGCTTCCACCGCTTCCAGCCCACCTATCC	413		
Sbjct	407		466		
Query	414	GTACCTGCAGCACGAGATCGACCTGCCACCCATCTCGCTGTCAGACGGGGAGGAGCC	473		
Sbjct	467		526		
Query	474	CCCACCCTACCAGGGCCCCTGCACCCTCCAGCTTCGGGACCCCGAGCAGCAGCTGGAACT	533		
Sbjct	527		586		

RID=11	4055	8082-32062-97435568291.BLASTQ4,	Page 6 of 37		
Query Sbjct	534 587		593 646		
Query Sbjct	594 647	TAGTGCCAGGCTGGGCGCCCCTGnnnnnnAGCAGTAACTCGGGCATCAGCGCCACGTG	653 706		
Query			713 766		
Sbjct Query		CTACCCGGGGTCCTCCTTCCAGCACCAGCAGAGCAGTGGGCCGCCCTCCTTGCTGGAGGG	773		
Sbjct	767		826		
Query Sbjct					
_		GAAGGATAAACAGAAAGGACACCCTCTC 861 914			
Identi	ties	.9 bits (32), Expect = 8e-07 = 32/32 (100%), Gaps = 0/32 (0%) s/Plus			
_		CGGAGCTGGAGTTTGTTCAGATCATCATC 141			
30)00	103	194			
	cipt	7617 ref NM 199170.1  UG Homo sapiens transmembrane, prostate variant 3, mRNA	androgen :		
Identi	ties	22 bits (667), Expect = 0.0 = 688/688 (100%), Gaps = 0/688 (0%) s/Plus			
Query Sbjct		CACGTGCCTGAGCCACTACAAGCTGTCTGCACGGTCCTTCATCAGCCGGCACAGCCA	233 227		
	234 228	GGGGCGGAGGAGAAGATGCCCTGTCCTCAGAAGGATGCCTGTGGCCCTCGGAGAGCAC	293 287		
_	294	AGTGTCAGGCAACGGAATCCCAGAGCCGCAGGTCTACGCCCCGCCTCGGCCCACCGACCG	353		
•	288		347		
	354 348	CCTGGCCGTGCCGCCCTTCGCCCAGCGGGAGCGCTTCCACCGCTTCCAGCCCACCTATCC	413 407		
	414 408	GTACCTGCAGCACGAGATCGACCTGCCACCCACCTCTCGCTGTCAGACGGGGAGGAGCC	473 467		
	474 468	CCCACCCTACCAGGGCCCCTGCACCCTCCAGCTTCGGGACCCCGAGCAGCAGCTGGAACT	533 527		
-	534 528	GAACCGGGAGTCGGTGCGCGCACCCCCAAACAGAACCATCTTCGACAGTGACCTGATGGA	593 587		
	594 588	TAGTGCCAGGCTGGGCCCCCTGnnnnnnAGCAGTAACTCGGGCATCAGCGCCACGTG	653 647		
~ 2	654 648	CTACGGCAGCGGCGCCATGGAGGGCCGCCCCCCCCACCTACAGCGAGGTCATCGGCCA	713 707		
~ 1	714 708	CTACCCGGGGTCCTCCTTCCAGCACCAGCAGAGCAGTGGGCCGCCCTCCTTGCTGGAGGG	773 767		
http://www.nchi.nlm.nih.gov/BLAST/Blast.cgi 2/21/06					

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Query 774 GACCCGGCTCCACCACACACACCGCCCCTAGAGAGCGCAGCCATCTGGAGCAAAGA 833
Sbjct 768
     834 GAAGGATAAACAGAAAGGACACCCTCTC 861
Query
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 Strand=Plus/Plus
Query 110 CGGAGCTGGAGTTTGTTCAGATCATCATC
Sbjct 104 .....
> [gi|50492890|emb|CR612083.1| U full-length cDNA clone CS0DJ015YF12 of T cells (Ju
Cot 10-normalized of Homo sapiens (human)
Length=901
 Score = 1322 bits (667), Expect = 0.0
 Identities = 688/688 (100%), Gaps = 0/688 (0%)
 Strand=Plus/Plus
Query 174 CACGTGCCTGAGCCACTACAAGCTGTCTGCACGGTCCTTCATCAGCCGGCACAGCCA 233
Sbjct 6
Query 234 GGGGCGGAGGAGAAGATGCCCTGTCCTCAGAAGGATGCCTGTGGCCCTCGGAGAGCAC
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Sbjct 66
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        CCTGGCCGTGCCGCCTTCGCCCAGCGGAGCGCTTCCACCGCTTCCAGCCCACCTATCC
Sbjct 186
Query 414
        GTACCTGCAGCACGAGATCGACCTGCCACCCACCATCTCGCTGTCAGACGGGGAGGAGCC
                                                      473
Sbjct 246
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Query 474
                                                      533
Sbjct 306
Query 534
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Sbjct 366
        Query 594
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                                                      653
Sbjct 426
        Query 654
        CTACGGCAGCGGCGGCGCATGGAGGGGCCGCCCCCCCACCTACAGCGAGGTCATCGGCCA 713
Sbjct 486
Query 714
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                                                      773
Sbjct 546
                                                      605
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     834 GAAGGATAAACAGAAAGGACACCCTCTC 861
Query
Sbjct
     666
        .......
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 $<sup>&</sup>gt; \Box gi | 16303741 | gb | AF305616.1 | AF305616$  UEG Homo sapiens STAG1/PMEPA1 mRNA, complet Length=4839

Score = 1322 bits (667), Expect = 0.0

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Identities = 688/688 (100%), Gaps = 0/688 (0%)
Strand=Plus/Plus
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                                                  233
Ouery 174
Sbjct 494
                                                  553
         Query 234
        GGGGCGGAGGAGAGATGCCCTGTCCTCAGAAGGATGCCTGTGGCCCTCGGAGAGCAC
                                                  293
Sbjct 554
                                                  613
        353
Query 294
Sbjct 614
         Query 354
        CCTGGCCGTGCCGCCCTTCGCCCAGCGGGAGCGCTTCCACCGCTTCCAGCCCACCTATCC
                                                  413
Sbjct 674
         733
        GTACCTGCAGCACGAGATCGACCTGCCACCACCATCTCGCTGTCAGACGGGGAGGAGCC
                                                  473
Query 414
Sbjct 734
                                                  793
Query 474
        CCCACCCTACCAGGGCCCCTGCACCCTCCAGCTTCGGGACCCCGAGCAGCAGCTGGAACT
                                                  533
Sbjct 794
                                                  853
        Query 534
        GAACCGGGAGTCGGTGCGCGCACCCCAAACAGAACCATCTTCGACAGTGACCTGATGGA
                                                  593
Sbjct 854
                                                  913
        TAGTGCCAGGCTGGGCGCCCCTGnnnnnnAGCAGTAACTCGGGCATCAGCGCCACGTG
Query
    594
                                                  653
Sbict 914
        973
Query 654
        CTACGGCAGCGGCGCGCATGGAGGGGCCGCCGCCACCTACAGCGAGGTCATCGGCCA
                                                 713
Sbjct 974
        1033
Query
    714
        CTACCCGGGGTCCTCCTTCCAGCACCAGCAGAGCAGTGGGCCGCCCTCCTTGCTGGAGGG
                                                  773
Sbjct 1034
                                                  1093
        Query 774
        GACCCGGCTCCACCACACACACCCCCCTAGAGAGCGCAGCCATCTGGAGCAAAGA 833
Sbjct 1094
        GAAGGATAAACAGAAAGGACACCCTCTC 861
Query 834
Sbjct 1154
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Identities = 95/95 (100%), Gaps = 0/95 (0%)
Strand=Plus/Plus
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Sbjct 367 .....
Query 107
       TCACGGAGCTGGAGTTTGTTCAGATCATCATCATC 141
Sbjct 427
       ...........
Score = 56.0 \text{ bits } (28), Expect = 2e-04
Identities = 28/28 (100%), Gaps = 0/28 (0%)
Strand=Plus/Plus
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Sbjct 321 .....
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> \[ \frac{\text{gi} | 22121998 | \text{gb} | \text{AY128643.1} | \] \[ \text{F} \] Homo sapiens PMEPA1 variant A protein mRNA, cor Length=1818

Query

Sbjct

353

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354 CCTGGCCGTGCCGCCCTTCGCCCAGCGGAGCGCTTCCACCGCTTCCAGCCCACCTATCC
Query
Sbjct
     344
     414 GTACCTGCAGCACGAGATCGACCTGCCACCCACCTCTCGCTGTCAGACGGGGAGGAGCC
                                                     473
Query
Sbjct
     404
        CCCACCCTACCAGGGCCCCTGCACCTCCAGCTTCGGGACCCCGAGCAGCAGCTGGAACT
                                                     533
Query
     474
Sbjct
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Ouery
     534
Sbjct 524
        594
Query
        TAGTGCCAGGCTGGGCGCCCCTGnnnnnnAGCAGTAACTCGGGCATCAGCGCCACGTG
Sbjct
    584
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Query
     654
                                                     713
Sbjct 644
                                                     703
        CTACCGGGGTCCTCCTTCCAGCACCAGCAGAGCAGTGGGCCGCCCTCCTTGCTGGAGGG
                                                     773
Query
     714
Sbjct
     704
        Query
     774
        GACCCGCTCCACCACACACACTCGCCCCCTAGAGAGCGCAGCCATCTGGAGCAAAGA
Sbjct
     764
        Query 834 GAAGGATAAACAGAAAGGACACCCTCTC 861
Sbjct 824 .....
Score = 63.9 bits (32), Expect = 8e-07
Identities = 32/32 (100%), Gaps = 0/32 (0%)
Strand=Plus/Plus
Query 110 CGGAGCTGGAGTTTGTTCAGATCATCATCATC 141
Sbjct
        > gi|16198474|gb|BC015918.1| UEG Homo sapiens transmembrane, prostate androgen i
(cDNA clone IMAGE:4559576), partial cds
Length=1061
Score = 1314 bits (663), Expect = 0.0
Identities = 687/688 (99%), Gaps = 0/688 (0%)
Strand=Plus/Plus
Query 174
       CACGTGCCTGAGCCACTACAAGCTGTCTGCACGGTCCTTCATCAGCCGGCACAGCCA
Sbjct 154
        Query 234
        GGGGCGAGGAGAAGATGCCCTGTCCTCAGAAGGATGCCTGTGGCCCTCGGAGAGCAC
                                                    293
Sbjct
        294
        Query
                                                     353
Sbjct
    274
                                                     333
        CCTGGCCGTGCCGCCTTCGCCCAGCGGAGCGCTTCCACCGCTTCCAGCCCACCTATCC
Query
    354
                                                     413
Sbjct
     334
Query
        GTACCTGCAGCACGAGATCGACCTGCCACCATCTCGCTGTCAGACGGGGAGGAGCC
                                                    473
    414
Sbjct
        394
                                                     453
Query
    474
        CCCACCTACCAGGGCCCCTGCACCCTCCAGCTTCGGGACCCCGAGCAGCAGCTGGAACT
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Sbjct
    454
                                                     513
        GAACCGGGAGTCGGTGCGCACCCCCAAACAGAACCATCTTCGACAGTGACCTGATGGA
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. KID=1	14055	8082-32062-97433368291.BLAS1Q4,	Page 11 of 3	/
Sbjct	514		573	
Query Sbjct		TAGTGCCAGGCTGGGCGCCCCTGnnnnnnnAGCAGTAACTCGGGCATCAGCGCCACGTG	653 633	
Query Sbjct	654 634	CTACGGCAGCGGCGCCATGGAGGGGCCGCCGCCCACCTACAGCGAGGTCATCGGCCA	713 693	
Query Sbjct	714 694	CTACCCGGGGTCCTCCTTCCAGCACCAGCAGAGCAGTGGGCCGCCCTCCTTGCTGGAGGG	773 753	
Query		GACCCGGCTCCACCACACACACCGCCCCTAGAGAGCGCAGCCATCTGGAGCAAAGA		
_		GAAGGATAAACAGAAAGGACACCCTCTC 861	813	
Sbjct	814			
Ident	ities	88 bits (95), Expect = 2e-44 = 95/95 (100%), Gaps = 0/95 (0%) s/Plus		
Query Sbjct		GGCAGCCCAATGTCTCCTGCACGTGCAACTGCAAACGCTCTTTGTTCCAGAGCATGGAGA		
Query Sbjct		TCACGGAGCTGGAGTTTGTTCAGATCATCATCATC 141 121		
> gi 51593770 gb BC080635.1  UG Homo sapiens transmembrane, prostate androgen inc variant 2, mRNA (cDNA clone MGC:99523 IMAGE:6569922), complete cds Length=1060  Score = 1298 bits (655), Expect = 0.0 Identities = 685/688 (99%), Gaps = 0/688 (0%) Strand=Plus/Plus				
Query <b>Sbjct</b>	174 153	CACGTGCCTGAGCCACTACAAGCTGTCTGCACGGTCCTTCATCAGCCGGCACAGCCA	233 212	
Query Sbjct	234 213	GGGGCGGAGGAGAAGATGCCCTGTCCTCAGAAGGATGCCTGTGGCCCTCGGAGAGCAC	293 272	
Query Sbjct	294 273	AGTGTCAGGCAACGGAATCCCAGAGCCGCAGGTCTACGCCCCGCCTCGGCCCACCGACCG	353 332	
Query Sbjct	354 333	CCTGGCCGTGCCGCCCTTCGCCCAGCGGGAGCGCTTCCACCGCTTCCAGCCCACCTATCC	413 392	
Query Sbjct	414 393	GTACCTGCAGCACGAGATCGACCTGCCACCCATCTCGCTGTCAGACGGGGAGGAGCC	473 452	
Query Sbjct	474 453	CCCACCCTACCAGGGCCCCTGCACCCTCCAGCTTCGGGACCCCGAGCAGCAGCTGGAACT	533 512	
Query Sbjct	534 513	GAACCGGGAGTCGGTGCGCGCACCCCCAAACAGAACCATCTTCGACAGTGACCTGATGGA	593 572	
Query Sbjct	594 573	TAGTGCCAGGCTGGGCGCCCCTGnnnnnnnAGCAGTAACTCGGGCATCAGCGCCACGTG	653 632	
Query Sbjct	654 633	CTACGGCAGCGGCGCCATGGAGGGCCCCCCCCCCACCTACAGCGAGGTCATCGGCCA	713 692	
http://www.ncbi.nlm.nih.gov/BLAST/Blast.cgi 2/21/06				

```
CTACCCGGGGTCCTCCTTCCAGCACCAGCAGAGCAGTGGGCCGCCCTCCTTGCTGGAGGG
Query 714
Sbjct 693
     Query
Sbjct 753
Query 834 GAAGGATAAACAGAAAGGACACCCTCTC 861
        ...... 840
Sbjct 813
Score = 63.9 bits (32), Expect = 8e-07
Identities = 32/32 (100%), Gaps = 0/32 (0%)
Strand=Plus/Plus
Query 110 CGGAGCTGGAGTTTGTTCAGATCATCATC
Sbjct 89
         > [gi | 11546043 | emb | AL035541.15 | HS718J7 | ED | Human DNA sequence from clone RP4-718J7
Contains the PCK1 gene for soluble phosphoenolpyruvate
carboxykinase 1, the ZBP1 gene for Z-DNA binding protein
1, the 3' end of the TMEPAI gene for transmembrane prostate
androgen induced mRNA, two putative novel genes, the 5' end
of the CTCFL gene for CCCTC-binding factor (zinc finger)-like
and a CpG island, complete sequence
Length=130435
Score = 1039 bits (524), Expect = 0.0
Identities = 545/545 (100%), Gaps = 0/545 (0%)
Strand=Plus/Minus
           AGCCGCAGGTCTACGCCCCGCCTCGGCCCACCGACCGCCCTGGCCGTGCCGCCCTTCGCCC 376
Query 317
Sbjct 128443
                                                          128384
          AGCGGGAGCGCTTCCACCGCTTCCAGCCCACCTATCCGTACCTGCAGCACGAGATCGACC 436
Query 377
Sbjct 128383
                                                          128324
          TGCCACCACCATCTCGCTGTCAGACGGGGAGGAGCCCCCACCCTACCAGGGCCCCTGCA
                                                          496
Query 437
Sbjct 128323 .....
                                                          128264
           CCCTCCAGCTTCGGGACCCCGAGCAGCAGCTGGAACTGAACCGGGAGTCGGTGCGCCAC
Query 497
                                                          128204
616
           CCCCAAACAGAACCATCTTCGACAGTGACCTGATGGATAGTGCCAGGCTGGGCGGCCCCT
Query 557
Sbjct 128203
                                                          128144
           GnnnnnnAGCAGTAACTCGGGCATCAGCGCCACGTGCTACGGCAGCGGCGGCGCATGG
Query 617
                                                          128084
Sbjct 128143
           AGGGGCCGCCCCCCTACAGCGAGGTCATCGGCCACTACCCGGGGTCCTCCTTCCAGC
Query 677
                                                          736
Sbjct 128083
                                                          128024
Query 737
           796
Sbjct 128023
                                                          127964
           TCGCGCCCCTAGAGAGCGCAGCCATCTGGAGCAAAGAGAAGGATAAACAGAAAGGACACC 856
Ouery 797
Sbjct 127963
          .....
           CTCTC 861
Query 857
Sbjct 127903 ..... 127899
```

Identities = 54/54 (100%), Gaps = 0/54 (0%)
Strand=Plus/Minus

Strand=Plus/Minus					
	265 128929		76		
gene,	> gi 15824468 gb AF305426.1 AF305426 D Homo sapiens solid tumor-associated 1 protegene, complete cds Length=61505				
Ident		bits (524), Expect = 0.0 545/545 (100%), Gaps = 0/545 (0%) Plus			
Query Sbjct	317 57303	AGCCGCAGGTCTACGCCCCGCCTCGGCCCACCGACCGCCTGGCCGTGCCGCCCTTCGCCC	376 57362		
Query Sbjct	377 57363	AGCGGGAGCGCTTCCACCGCTTCCAGCCCACCTATCCGTACCTGCAGCACGAGATCGACC	436 57422		
Query Sbjct	437 57423	TGCCACCCACCATCTCGCTGTCAGACGGGGAGGAGCCCCCACCCTACCAGGGCCCCTGCA	496 57482		
Query Sbjct	497 57483	CCCTCCAGCTTCGGGACCCCGAGCAGCAGCTGGAACTGAACCGGGAGTCGGTGCGCGCAC	556 57542		
Query Sbjct	557 57543	CCCCAAACAGAACCATCTTCGACAGTGACCTGATGGATAGTGCCAGGCTGGGCGGCCCCT	616 57602		
Query Sbjct	617 57603	GnnnnnnAGCAGTAACTCGGGCATCAGCGCCACGTGCTACGGCAGCGGCGGCGCATGG	676 57662		
Query Sbjct	677 57663	AGGGGCCGCCCCCCTACAGCGAGGTCATCGGCCACTACCCGGGGTCCTCCTTCCAGC	736 57722		
Query Sbjct	737 57723	ACCAGCAGAGCAGTGGGCCGCCCTCCTTGCTGGAGGGGACCCGGCTCCACCACACACA	796 57782		
Query Sbjct	797 57783	TCGCGCCCCTAGAGAGCGCAGCCATCTGGAGCAAAGAGAAGGATAAACAGAAAGGACACC	856 57842		
-		CTCTC 861 57847			
Score = 182 bits (92), Expect = 1e-42 Identities = 92/92 (100%), Gaps = 0/92 (0%) Strand=Plus/Plus					
_	174 50270				
_		GGGGCGGAGGAGAAGATGCCCTGTCCTCAG 265			
<pre>Score = 125 bits (63), Expect = 3e-25 Identities = 63/63 (100%), Gaps = 0/63 (0%) Strand=Plus/Plus</pre>					
Query			06		

```
Query 107 TCA 109
Sbjct 427 ... 429
 Score = 107 bits (54), Expect = 6e-20
 Identities = 54/54 (100%), Gaps = 0/54 (0%)
Strand=Plus/Plus
Query 265
          GAAGGATGCCTGTGGCCCTCGGAGAGCACAGTGTCAGGCAACGGAATCCCAGAG 318
Sbjct 56817 ......
                                                  56870
Score = 63.9 bits (32), Expect = 8e-07
 Identities = 32/32 (100%), Gaps = 0/32 (0%)
Strand=Plus/Plus
          CGGAGCTGGAGTTTGTTCAGATCATCATCATC 141
Query 110
Sbjct 50206 ..... 50237
Score = 56.0 \text{ bits } (28), Expect = 2e-04
Identities = 28/28 (100%), Gaps = 0/28 (0%)
Strand=Plus/Plus
        ATGCACCGCTTGATGGGGGTCAACAGCA 28
Query 1
Sbjct 321 .....
> \Box gi | 55652999 | ref | XM 514746.1 | G | PREDICTED: Pan troglodytes LOC458363 (LOC458363),
Length=1059
Score = 995 bits (502), Expect = 0.0
Identities = 538/543 (99%), Gaps = 0/543 (0%)
Strand=Plus/Plus
Query 319 CCGCAGGTCTACGCCCCGCCTCGGCCACCGACCGCCTGGCCGTGCCGCCCTTCGCCCAG
Sbjct 454
                                                    513
Query 379 CGGGAGCGCTTCCACCGCTTCCAGCCCACCTATCCGTACCTGCAGCACGAGATCGACCTG 438
Query 439 CCACCCACCATCTCGCTGTCAGACGGGGAGGCCCCCACCCTACCAGGGCCCCTGCACC 498
Query 499 CTCCAGCTTCGGGACCCCGAGCAGCTGGAACTGAACCGGGAGTCGGTGCGCGCACCC 558
Sbjct 634
        Query 559 CCAAACAGAACCATCTTCGACAGTGACCTGATGGATAGTGCCAGGCTGGGCGGCCCCTGn
Sbjct 694 .....
Query 619 nnnnnAGCAGTAACTCGGGCATCAGCGCCACGTGCTACGGCAGCGGCGGCGGCGATGGAG
                                                    678
Sbjct 754
                                                    813
Query 679 GGGCCGCCCCCCCTACAGCGAGGTCATCGGCCACTACCCGGGGTCCTCCTTCCAGCAC
                                                    738
798
Sbjct 874
Query 799 GCGCCCTAGAGAGCCCAGCCATCTGGAGCAAAGAGAAGGATAAACAGAAAGGACACCCT 858
       Query 859 CTC 861
Sbjct 994
           996
       . . .
```

```
Score = 107 bits (54), Expect = 6e-20
Identities = 54/54 (100%), Gaps = 0/54 (0%)
Strand=Plus/Plus
Query 265 GAAGGATGCCTGTGGCCCTCGGAGAGCACAGTGTCAGGCAACGGAATCCCAGAG 318
Sbjct 294
                                           347
       > I gi | 73992626 | ref | XM 543070.2 | G PREDICTED: Canis familiaris similar to Transmemb)
androgen-induced protein (Solid tumor-associated 1 protein)
(LOC485945), mRNA
Length=2142
Score = 872 bits (440), Expect = 0.0
Identities = 634/691 (91%), Gaps = 3/691 (0%)
Strand=Plus/Plus
        CACGTGCCTGAGCCACTACAAGCTGTCTGCACGGTCCTTCATCAGCCGGCACAGCCA 233
Query 174
        Sbjct 471
        GGGGCGGAGGAGAAGATGCCCTGTCCTCAGAAGGATGCCTGTGGCCCTCGGAGAGCAC
                                                293
Query 234
        590
Sbjct 531
        Query 294
                                                353
Sbjct 591
        CCTGGCCGTGCCGCCCTTCGCCCAGCGGGAGCGCTTCCACCGCTTCCAGCCCACCTATCC
Query 354
                                                413
Sbjct 651
        710
        GTACCTGCAGCACGAGATCGACCTGCCACCCACCATCTCGCTGTCAGACGGGGAGGAGCC
Query 414
                                                473
Sbjct 711
        Query 474
        CCCACCCTACCAGGGCCCCTGCACCTCCAGCTTCGGGACCCCGAGCAGCAGCTGGAACT
                                                533
Sbjct 771
        830
        GAACCGGGAGTCGGTGCGCGCACCCCCAAACAGAACCATCTTCGACAGTGACCTGATGGA
                                                593
Query 534
        Sbjct 831
        TAGTGCCAGGCTGGGCGCCCTGnnnnnnnAGCAGTAACTCGGGCATCAGCGCCACGTG
                                                653
Query 594
Sbjct 891
        C.....T.T.....
                                                950
        CTACGGCAGCGGGGGCGCATGGAGGGCCGCCCACCTACAGCGAGGTCATCGGCCA
                                                713
Ouery 654
        1010
Sbjct 951
        CTACCCGGGGTCC - - - TCCTTCCAGCACCAGCAGGGGGGGGGCCGCCCTCCTTGCTGGA
                                                770
Query 714
Sbjct 1011
        Query 771
        GGGGACCCGCCTCCACCACACACACTCGCCCCCTAGAGAGCGCAGCCATCTGGAGCAA
                                                830
       Sbjct 1071
        AGAGAAGGATAAACAGAAAGGACACCCTCTC 861
Query 831
1161
Score = 44.1 bits (22), Expect = 0.73
Identities = 28/30 (93%), Gaps = 0/30 (0%)
Strand=Plus/Plus
Query 112 GAGCTGGAGTTTGTTCAGATCATCATC
```

```
sequence
Length=124577
Score = 644 bits (325), Expect = 0.0
Identities = 494/544 (90%), Gaps = 3/544 (0%)
Strand=Plus/Minus
        AGCCGCAGGTCTACGCCCCGCCTCGGCCCACCGACCGCCTGGCCGTGCCGCCCTTCGCCC
Query 317
54995
        AGCGGGAGCGCTTCCACCGCTTCCAGCCCACCTATCCGTACCTGCAGCACGAGATCGACC 436
Query 377
TGCCACCACCATCTCGCTGTCAGACGGGGAGGACCCCCACCCTACCAGGGCCCCTGCA 496
Query 437
54875
        CCCTCCAGCTTCGGGACCCCGAGCAGCAGCTGGAACTGAACCGGGAGTCGGTGCGCGCAC 556
Query 497
\tt CCCCAAACAGAACCATCTTCGACAGTGACCTGATGGATAGTGCCAGGCTGGGCGGCCCCT
Query 557
                                             616
Query 617
                                             676
54695
        AGGGGCCGCCCACCTACAGCGAGGTCATCGGCCACTACCCGGG - - - GTCCTCCTTCC
Query 677
                                             733
54635
Query 734
        AGCACCAGCAGAGCAGTGGGCCGCCTCCTTGCTGGAGGGGGACCCGGCTCCACCACACAC 793
Query 794
        ACATCGCGCCCTAGAGAGCGCAGCCATCTGGAGCAAAGAGAAGGATAAACAGAAAGGAC 853
Query 854
        ACCC 857
Sbjct 54514 .... 54511
Score = 125 bits (63), Expect = 3e-25
Identities = 63/63 (100%), Gaps = 0/63 (0%)
Strand=Plus/Minus
Query 47
        GGCAGCCCAATGTCTCCTGCACGTGCAACTGCAAACGCTCTTTGTTCCAGAGCATGGAGA 106
Sbjct 104963 ..... 104904
Query 107
        TCA 109
Sbjct 104903 ... 104901
Score = 91.7 bits (46), Expect = 3e-15
Identities = 79/90 (87%), Gaps = 0/90 (0%)
Strand=Plus/Minus
       CACGTGCCTGCTGAGCCACTACAAGCTGTCTGCACGGTCCTTCATCAGCCGGCACAGCCA 233
Query 174
Query 234
        GGGGCGGAGGAGAAGATGCCCTGTCCTC 263
Sbjct 59472 ...CA..C....G.....C..G..... 59443
Score = 60.0 bits (30), Expect = 1e-05
Identities = 48/54 (88%), Gaps = 0/54 (0%)
Strand=Plus/Minus
```

> Igi | 82524234 | emb | CR956367.12 | D Pig DNA sequence from clone PigE-122C21 on chromo

```
GAAGGATGCCTGTGGCCCTCGGAGAGCACAGTGTCAGGCAACGGAATCCCAGAG
Query 265
Score = 48.1 \text{ bits } (24), Expect = 0.047
Identities = 27/28 (96%), Gaps = 0/28 (0%)
Strand=Plus/Minus
         ATGCACCGCTTGATGGGGGTCAACAGCA 28
Ouerv 1
> qi | 18605637 | qb | BC023092.1 | UE G Mus musculus cDNA clone IMAGE: 3989996, partial
Length=1079
Score = 531 bits (268), Expect = 1e-147
Identities = 528/608 (86%), Gaps = 12/608 (1%)
Strand=Plus/Plus
Query 178 TGCCTGCTGAGCCACTACAAGCTGTCTGCACGGTCCTTCATCAGCCGGCACAGCCAGGGG
Sbjct 188
       Query 238 CGGAGGAGAGATGCCCTGTCCTCAGAAGGATGCCTGTGGCCCTCGGAGAGCACAGTG 297
Sbjct 248 A.....C....GA.......G.....C....A....T..G...
    357
Query
       Sbjct 308
       GCCGTGCCGCCCTTCGCCCAGCGGGAGCGCTTCCACCGCTTCCAGCCCACCTATCCGTAC
                                               417
Query 358
       Sbjct 365
Query 418 CTGCAGCACGAGATCGACCTGCCACCCACCATCTCGCTGTCAGACGGGGAGGAGCCCCCA
                                               477
Sbjct 416
       .....A...T.C......A...T.T.T......
       CCCTACCAGGGCCCCTGCACCTCCAGCTTCGGGACCCCGAGCAGCAGCTGGAACTGAAC
                                               537
Query 478
Sbjct 476
       Query 538 CGGGAGTCGGTGCGCGCACCCCCAAACAGAACCATCTTCGACAGTGACCTGATGGATAGT
                                               597
Sbjct 536
       Query 598 GCCAGGCTGGGCGCCCCTGnnnnnnnAGCAGTAACTCGGGCATCAGCGCCACGTGCTAC
Query 658 GGCAGCGGCGCGCATGGAGGGGCCCCCCCCCACCTACAGCGAGGTCATCGGCCACTAC
                                               717
715
Query 718 CCGGGGTCCTCCAGCACCAGCAGCAGTGGGCCGCCCTCCTTGCTGGAGGGGACC
                                               777
Query 778 CGGCTCCA 785
Sbjct 776
       ..... 783
Score = 111 bits (56), Expect = 4e-21
Identities = 71/76 (93%), Gaps = 0/76 (0%)
Strand=Plus/Plus
       GGCAGCCCAATGTCTCCTGCACGTGCAACTGCAAACGCTCTTTGTTCCAGAGCATGGAGA 106
Query 47
Sbjct 57
       Query 107 TCACGGAGCTGGAGTT 122
Sbjct 117
       . . . . . . . . . . . . . . . .
```